

CLAIMS

1. A device (4) for heating food by means of induction comprising a heating means (8) comprising a secondary winding (28, 50, 68, 80) formed from a current conductor and a heating element (34) connected to said winding (28, 50, 68, 80), characterised by a winding core (27, 74) disposed inside said secondary winding (28, 50, 68, 80).
2. A device (2) for transmitting energy to a device (4) for heating food by means of induction comprising a primary winding (20, 58, 82) formed from a current conductor and connected to a voltage source, characterised by a winding core (16, 72) located inside the said primary winding (20, 58, 82).
3. The device (2, 4) according to claim 1 or claim 2, characterised in that the winding core (16, 27, 72, 74) is configured as rotationally symmetrical.
4. The device (2, 4) according to any one of the preceding claims characterised in that the winding core (16, 72, 74) is configured as a pot core.
5. The device (2, 4) according to claim 4, characterised in that the winding (16, 72, 74) comprises a central column (76, 78) having a first axial height and an annular side wall (86, 66) having a second axial height different from the first axial height.
6. The device (2, 4) according to any one of the preceding claims characterised in that the winding core (27) comprises a plurality of core elements (26, 46, 56, 62).
7. The device (2, 4) according to claim 6, characterised in that the core elements (26, 46, 56, 62) are arranged on a circular path and especially are configured as circular-ring-segment-shaped.
8. The device (2, 4) according to claim 7, characterised in that the core elements (26) are formed as U-shaped in one radial cross-section.

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9. The device (2, 4) according to claim 7, characterised in that the core elements (46, 56, 62) are formed as E-shaped in one radial cross-section.
10. The device (2, 4) according to any one of claims 6 to 9, characterised by a retaining means which interconnects the core elements (26, 46, 56, 62) in a load-bearing manner.
11. The device (2, 4) according to claim 10, characterised in that the retaining means is a printed circuit board (30, 52, 66).
12. The device (2, 4) according to claim 10 or claim 11, characterised in that the retaining means is configured as ring-shaped.
13. The device (2, 4) according to any one of the preceding claims characterised in that the winding (20, 28, 50, 68) is arranged on a printed circuit board (30, 52, 66).
14. The device (2, 4) according to any one of the preceding claims characterised in that the winding (20, 28, 50, 68) is arranged as spiral-shaped.
15. The device (2) according to claim 1 and any one of claims 6 to 10, characterised in that the heating element (34) comprises the same number of identical heating conductors (44) as the winding core (27) has core elements (26, 46, 56, 62).
16. The device (2) according to claim 15, characterised in that at least two heating conductors (44) are arranged symmetrically with respect to one another and especially in a circular heating area.
17. The device (2) according to claim 15 or claim 16, characterised in that the heating conductors (44) are arranged in a circular heating area and each heating conductor (44) is arranged so that it is uniformly distributed in a piece-of-cake-shaped segment.